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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/155,231	09/23/1998	SEPPO HAMALAINEN	11902.9USWO	8336
32294	7590	02/16/2005	EXAMINER	
SQUIRE, SANDERS & DEMPSEY L.L.P.			DUONG, DUC T	
14TH FLOOR			ART UNIT	
8000 TOWERS CRESCENT			PAPER NUMBER	
TYSONS CORNER, VA 22182			2663	

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/155,231	HAMALAINEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Duc T. Duong	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 October 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-4, 8, 11, 14-23, 25, 27, 29-39, 41, 43 and 45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3, 4, 8, 11, 25 and 41 is/are allowed.
- 6) ☒ Claim(s) 2, 14, 16-19, 21-23, 27, 29, 30, 32-35, 37-39, 43 and 45 is/are rejected.
- 7) ☒ Claim(s) 15, 20, 31 and 36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☒ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \*   c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other:  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The indicated allowability of claims 14, 16-19, 21-23, 27, 29, 30, 32-34, 35, 37-39, 43, and 45 are withdrawn in view of the rejections based on the cited reference(s) follow.
2. The finality of the rejection of the last Office action is withdrawn.

### ***Claim Objections***

3. Claims 3, 4, 8, and 11 are objected to because of the following informalities: In claims 3, 4, 8 and 11, line 9, after the word "transfer" a comma should be inserted. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 2663

5. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Behtash et al (US Patent 5745,480).

Regarding to claim 2, Behtash discloses a method (Fig. 4) of controlling the transmission power used in a digital radio link in a system 100 (Fig. 1) where a base station 102 (Fig. 1) and a personal station 104-106 (Fig. 1) are parties to the radio connection and during operation between them either party may send a power control command, which will change the transmission power of the other party, the method comprising identifying a change (step 204; identifying desired rate and BER) in data transfer of the first party 104-106 by the second party 102 (col. 4 lines 28-30); in response to the data transfer, changing the manner in which the power control commands (step 208; computing the power to be allocated for the desired rate and BER) are to be sent to the first party by the second party to be in accordance with the changed data transfer (col. 4 lines 55-67); changing the data transfer of the second party (step 218; col. 5 lines 36-38); and changing the manner in which the power control commands are to be sent to the second party by the first party (col. 5 lines 44-50; the first party 104-106 calculate the transmission power to be sent to the second party 102 by estimating the propagation loss and adding its to the received power).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 14, 16-19, 21-23, 27, 29, 30, 32-34, 35, 37-39, 43, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Behtash in view of Padovani et al (US Patent 5,396,516).

Regarding to claims 14, 19, 27, 29, 30, 35, 43, and 45, Behtash discloses a base station 102 for having a radio connection with a personal station 104-106 in a digital radio link (Fig.1), said base station configured to identify a change (step 204; identifying desired rate and BER) in amount of traffic received from said personal station (Fig. 4 col. 4 lines 28-30); determine (step 208; computing the power to be allocated for the desired rate and BER) a transmission of a power control command based on said change in the amount of traffic (Fig. 4 col. 4 lines 55-67); and transmit (step 218) said power control command  $S_i$  to said personal station in accordance with said transmission (Fig. 4 col. 5 lines 44-46).

Behtash fails to teach or determining and transmitting the power control command at a frequency based on said change in the amount of traffic.

However, Padovani suggests a communication system a method and system for power control, wherein power control command are sent at a frequency to avoid excessive transmission and insufficient transmission (col. 1 lines 27-33).

Thus, it would have been obvious to a person of ordinary skill in the art to include the power control system and method as taught by Padovani in Behtash's system to minimize interference and signal loss.

Regarding to claims 16, 21, 32, and 37, Behtash discloses the determining a frequency transmission power control command includes negotiating with said personal

Art Unit: 2663

station to change said frequency of transmission power control command (steps 224-228; Fig. 4 col. 5 lines 33-42).

Regarding to claims 17, 22, 33, and 38, Behtash discloses the determining said frequency of transmission of said power control command includes determining said frequency of transmission based on a change in frequency of received power control commands from said personal station (step 204; Fig. 4 col. 4 lines 28-30).

Regarding to claims 18, 23, 34, and 39, Behtash discloses the identifying includes receiving a request from said personal station to change transmission between said personal station and a base station (step 204; Fig. 4 col. 4 lines 28-30).

***Allowable Subject Matter***

8. Claims 15, 20, 31, and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 3, 4, 8, 11, 25, and 41 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record above fails to teach or make obvious the step of or means for **“wherein when the changed data transfer relates to a decreased transmission rate of the first party, the second party will decrease a frequency of power control commands to be sent to the first party and, correspondingly, when the changed data transfer relates to an increased transmission rate, the second party will increase the frequency of power control commands”**, when such frequency of power control is considered within the specific combination of steps recited

Art Unit: 2663

in the method of claim 3. The prior art of record above fails to teach or make obvious the step of or means for **“wherein the power control command is formed of a plurality of bits and when the changed data transfer relates to a decreased transmission rate of the first party, the second party will shorten a length of the power control command and, correspondingly, when the changed data transfer relates to an increased transmission rate, the second party will extend the length of the power control command”**, when such power control command is considered within the specific combination of steps recited in the method of claim 4. The prior art of record above fails to teach or make obvious the step of or means for **“wherein the power control commands are transmitted at first and second transfer rates, the second transfer rate being lower than the first transfer rate, of which the second transfer rate is used when the transmission of the first party is in a DTX state”**, when such power control command is considered within the specific combination of steps recited in the method of claim 8. The prior art of record above fails to teach or make obvious the step of or means for **“wherein the manner in which the power control commands are to be sent in one direction is changed in reverse proportion to a load of the opposite transfer direction”**, when such power control command is considered within the specific combination of steps recited in the method of claim 11. The prior art of record above fails to teach or make obvious the step of or means for **“identifying an absence of traffic received from said base station”**, when such identifying is considered within the specific combination of steps recited in the method of claim 25 or the device of claim 41.

Art Unit: 2663

**Conclusion**


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Duong whose telephone number is 571-272-3122. The examiner can normally be reached on M-F (9:00 AM-5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DD

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RICKY NGO  
PRIMARY EXAMINER